AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for measuring a <u>differential mode delay (DMD) of a</u> multimode optical fiber comprising:

monitoring a temperature ~~change within a measurement time in a DMD measurement~~ of the multimode optical fiber, <u>during a measurement time of the DMD of the optical fiber;</u>

<u>measuring a change of temperature of the optical fiber during the measurement time; and</u>

<u>controlling the temperature of the optical fiber such that an absolute value of the change</u> <u>of temperature of the optical fiber is maintained within a predetermined range during the</u> <u>measurement time</u>

~~wherein the DMD measurement is carried out in an environment in which a magnitude of~~ ~~temperature change is controlled~~.

2. (currently amended): The method for measuring a <u>differential mode delay (DMD) of</u> <u>a</u> multimode optical fiber according to claim 1, wherein <u>the predetermined range is calculated</u> <u>such that</u> a product of ~~a~~ <u>the</u> measurement time and a rate of temperature change during the measurement of the ~~measured~~ <u>DMD of the optical</u> fiber is 0.4°C or less.

3. (currently amended): The method for measuring a <u>differential mode delay (DMD) of</u> <u>a</u> multimode optical fiber according to claim 1, wherein <u>the predetermined range is calculated</u>

such that a product of the measurement time and a rate of temperature change during the

measurement of the ~~measured~~ DMD of the optical fiber is 0.3°C or less.

4. (currently amended): The method for measuring a differential mode delay (DMD) of

a multimode optical fiber according to claim 1, wherein the predetermined range is calculated

such that ~~the measurement is carried out in an environment in which~~ a rate of temperature change

of the ambient environment is controlled to ±1.0°C/hour or less.

5. (currently amended): The method for measuring a differential mode delay (DMD) of

a multimode optical fiber according to claim 1, wherein the measurement time is ~~set within~~ not

more than 10 minutes.

6. (currently amended): The method for measuring a differential mode delay (DMD) of

a multimode optical fiber according to claim 1, wherein the measurement time is ~~set within~~ not

more than 3 minutes.

7. (currently amended): The method for measuring a differential mode delay (DMD) of

a multimode optical fiber according to claim 1, wherein the predetermined range is calculated

such that ~~the measurement is carried out in an environment in which~~ a rate of temperature change

of the ambient environment is controlled to ±1.0°C/hour or less and the measurement time is ~~set~~

~~within~~ not more than 10 minutes.

8. (currently amended): The method for measuring a <u>differential mode delay (DMD) of</u> a multimode optical fiber according to claim 1, ~~wherein the DMD measurement is carried out~~ ~~after~~<u>further comprising:</u>

<u>prior to the measurement time of the DMD of the optical fiber,</u> placing the <u>optical</u> fiber ~~to be measured~~ in ~~the~~ <u>a</u> measurement environment until ~~a~~ <u>the</u> temperature of the optical fiber substantially equals a temperature of the measurement environment ~~before carrying out the DMD measurement.~~

9. (new): The method for measuring a differential mode delay (DMD) of a multimode optical fiber according to claim 1, wherein the measurement time is not more than 5 minutes.

10. (new): The method for measuring a differential mode delay (DMD) of a multimode optical fiber according to claim 1, wherein the predetermined range is calculated such that a rate of temperature change of the ambient environment is controlled to ±5.0°C/hour or less